

## TEST YOURSELF ON INVENTORIES AND THE COST OF GOODS SOLD

### True or False

- T F 1. A major objective of accounting for inventories is proper measurement of net income.
- T F 2. In a perpetual inventory system, ledger accounts for inventory and the cost of goods sold are continuously updated for purchases and sales of merchandise.
- T F 3. The specific identification method of inventory valuation is particularly appropriate for low-priced, high-volume articles.
- T F 4. Inventories are usually valued at cost, but the cost figure for inventory can differ significantly depending upon which inventory method is used.
- T F 5. The average-cost method places more weight on the prices at which large purchases were made than on the price at which small purchases were made.
- T F 6. Using the first-in, first-out (FIFO) method during a period of rising prices implies that the cheaper goods have been sold and the more costly goods are still on hand.
- T F 7. If we consider the "true" cost of sales to be the replacement cost of goods sold, income statements using historical costs tend to understate net income during periods of inflation.
- T F 8. During a period of rapid inflation, using LIFO will maximize reported net income.
- T F 9. Using the LIFO method implies that the ending inventory consists of the most recently acquired goods.
- T F 10. Consistency in the valuation of inventory requires that a method once adopted cannot be changed unless the company is sold.
- T F 11. It is acceptable practice to understate inventories at year-end as long as it is done consistently from year to year.

- T F 12. Taking physical inventory refers to the physical count to determine the quantity of inventory on hand; pricing the inventory means determining the cost of the inventory on hand.
- T F 13. The use of the lower-of-cost-or-market produces a conservative inventory valuation because unrealized losses are treated as actually incurred.
- T F 14. If the terms of shipment are F.O.B. shipping point, the goods in transit should normally belong to the seller.
- T F 15. The recording of a sale in the wrong period will have no effect on the net income for each period if the goods are excluded from inventory in the period in which the sale is recorded.
- T F 16. An error in the valuation of inventory at the end of the period will cause errors in net income for two periods.
- T F 17. Errors in the valuation of inventory are counterbalancing; an error which causes an overstatement of net income this period will cause an understatement next period.
- T F 18. An overstatement of ending inventory will cause an understatement of net income.
- T F 19. In tax audits, the IRS often investigates the taxpayer's inventory because overstated inventory will cause the taxpayer's net income to be understated.
- T F 20. The gross profit method permits a business to estimate inventory without actually taking a physical count of the goods on hand.
- T F 21. The retail method of inventory valuation permits a business to take the physical inventory and price it at current retail prices rather than look up invoices to determine the cost of goods on hand.
- T F 22. The operating cycle for a merchandising business is equal to 365 days divided by the inventory turnover rate.

### Completion Statements

Fill in the necessary word to complete the following statements:

- In a perpetual inventory system, purchases are recorded by a debit to \_\_\_\_\_ and a credit to Accounts Payable. Sales are recorded by two entries: (a) a debit to Accounts Receivable and a credit to \_\_\_\_\_ for the \_\_\_\_\_ price of the merchandise and (b) a debit to \_\_\_\_\_ and a credit to \_\_\_\_\_ for the \_\_\_\_\_ of the goods.
- The four most commonly used inventory valuation methods are: \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, and \_\_\_\_\_.

3. During a period of rising prices, using the \_\_\_\_\_ method implies that the cheaper goods are still on hand while the more expensive ones were sold.
4. A \_\_\_\_\_ inventory system is designed to minimize a company's investment in inventory.
5. The lower-of-cost-or-market rule results in the recognition of a \_\_\_\_\_ in the \_\_\_\_\_ cost of inventory. However, an \_\_\_\_\_ in the \_\_\_\_\_ cost would not be recognized.
6. If goods are shipped F.O.B. destination, the \_\_\_\_\_ to the goods while in transit belongs to the \_\_\_\_\_ and the goods should be excluded from the inventory of the \_\_\_\_\_.
7. In a periodic inventory system, purchases are recorded by a debit to \_\_\_\_\_ and a credit to Accounts Payable or Cash. Sales are recorded by a single entry which debits \_\_\_\_\_ and credits \_\_\_\_\_ for the \_\_\_\_\_ price of the merchandise.
8. Ending inventories are overstated as follows: Year 1 by \$20,000; Year 2 by \$8,000; and Year 3 by \$15,000. Net income for each of the three years was computed at \$25,000. The corrected net income figure (ignoring the effect of income taxes) for each of the three years is: Year 1, \$ \_\_\_\_\_; Year 2, \$ \_\_\_\_\_; Year 3 \$ \_\_\_\_\_.
9. The method of inventory valuation frequently used by retail stores is first to value the inventory at \_\_\_\_\_ and then to convert this amount to a \_\_\_\_\_ figure by applying the \_\_\_\_\_ of cost to selling prices during the current period.
10. The inventory turnover rate is computed by dividing \_\_\_\_\_ by \_\_\_\_\_. The accounts receivable turnover rate is computed by dividing \_\_\_\_\_ by \_\_\_\_\_; the number of days required to collect receivables is computed by dividing \_\_\_\_\_ by the \_\_\_\_\_.

### Multiple Choice

Choose the best answer for each of the following questions and enter the identifying letter in the space provided.

- \_\_\_ 1. Which of the following four items would *not* be included in inventories on the balance sheet?
- a. Raw materials used in manufacture of chemicals.
  - b. Building materials used in construction.
  - c. Cars left by customers at an auto repair shop.
  - d. Goods purchased but not yet delivered to premises (title passed).

— 2. A *perpetual* inventory system:

- a. Requires the use of the first-in, first-out (FIFO) basis of pricing inventory sold.
- b. Provides such strong internal control that custody of assets need not be separate from the accounting records for inventory.
- c. Eliminates the need for taking an annual physical inventory.

Maintains a continuously updated Inventory account as well as a continuously updated Cost of Goods Sold account.

— 3. Which of the following is *not* an acceptable inventory method?

- a. Lower of cost or market.
- b. Sales value.
- c. Specific identification.
- d. First-in, first-out.

— 4. During a period of rising prices, which inventory pricing method might be expected to give the *lowest* valuation for inventory on the balance sheet and the *lowest* net income figure?

- a. Cost on a LIFO basis.
- b. Cost on a FIFO basis.
- c. Average cost.
- d. FIFO, lower of cost or market.

— 5. A physical inventory should be carefully planned in order to ensure each of the following *except*:

- a. Goods located in the receiving department are included.
- b. The correct inventory valuation method is used.
- c. Damaged goods are excluded.
- d. Merchandise for which an order has been received, but which has not been shipped, is included.

— 6. Goods costing \$750 are sold for \$1,000 at the end of Year 1, but the sale is recorded in Year 2. The goods *were* included in the ending inventory at the end of Year 1. The most likely effect of this error is:

- a. Net income for Year 1 was understated by \$1,000.
- b. Net income for Year 2 was overstated by \$250.
- c. Beginning inventory for Year 2 was understated by \$750.
- d. Net income for Year 1 was overstated by \$250.

- \_\_\_ 7. Which of the following statements regarding inventory costing methods is *true*?
- a. Cost flow assumptions are not used in a periodic inventory system; the cost of ending inventory is determined by specific identification based upon units counted in the physical inventory.
  - b. Perpetual and periodic inventory systems will always result in different figures for ending inventory, even if the same inventory costing method is used in each.
  - c. Perpetual and periodic inventory systems will always result in the same figure for ending inventory, as long as the same inventory costing method is used in each.
  - d. Applying LIFO costing procedures in a periodic system may result in a lower "cost" for ending inventory than if LIFO were applied on a perpetual basis.
- \_\_\_ 8. An overstatement of \$1,000 in the inventory at the end of Year 4 would:
- a. Understate the beginning inventory of Year 5.
  - b. Have no effect on net income of Year 3.
  - c. Overstate purchases for Year 5.
  - d. Have no effect on net income of Year 4.
- \_\_\_ 9. The *gross profit* method of estimating inventories:
- a. Is a useful means of determining the rate of gross profit without taking a physical inventory.
  - b. Is a useful means of verifying the reasonableness of a physical inventory count.
  - c. Provides information about the number of units in the ending inventory.
  - d. Provides information about changes in the rate of gross profit.
- \_\_\_ 10. The *retail method* of estimating inventory:
- a. Converts ending inventory at retail selling price to cost by multiplying the gross profit percentage.
  - b. Computes the cost of goods sold by multiplying net sales by the cost percentage; and then deducts this amount from cost of goods available to find ending inventory.
  - c. Requires a business to maintain records showing beginning inventory and purchases at both cost and retail prices.
  - d. Assumes that the gross profit rate remains the same as it was in preceding years.
- \_\_\_ 11. Assume Franco Company and Limerick Corporation are *identical in all respects* except that Franco uses FIFO and Limerick uses LIFO in accounting for inventory. In a period of rising prices, each of the following statements is accurate *except*:
- a. Limerick reports lower net income and lower income tax expense than does Franco.
  - b. Limerick will appear to have a higher inventory turnover rate and longer operating cycle than will Franco.
  - c. Limerick's current ratio is lower than Franco's.
  - d. Limerick's cost of goods sold figure more closely approximates current cost of merchandise sold than does Franco's.

## Exercises

1. Listed below are eight technical accounting terms emphasized in this chapter.

*LCM rule*

*Cost ratio*

*FIFO method*

*LIFO method*

*Gross profit method*

*Retail inventory method*

*Inventory shrinkage*

*Consistency*

Each of the following statements may (or may not) describe one of these technical terms. In the space provided below each statement, indicate the accounting term described, or answer "None" if the statement does not correctly describe any of the terms.

- a. Loss due to missing or damaged units which is recorded in a separate adjusting entry in a perpetual inventory system.  
\_\_\_\_\_
- b. A method of inventory valuation in which inventory is reported at retail prices.  
\_\_\_\_\_
- c. A method of estimating the cost of the ending inventory based on the assumption of a constant gross profit rate.  
\_\_\_\_\_
- d. A method of inventory valuation that assumes the ending inventory consists of goods acquired in the earliest purchases.  
\_\_\_\_\_
- e. The ratio of cost to selling price.  
\_\_\_\_\_
- f. A method of pricing in which inventory is valued at the lower of original cost or replacement cost.  
\_\_\_\_\_
- g. Accounting standard that requires use of the same method of inventory pricing from year to year, with full disclosure of the effects of any change in method.  
\_\_\_\_\_

2. Hom Corporation uses the FIFO method in a perpetual system and adjusts the accounting records to the physical inventory taken at year-end. In each of the situations described on the next page, indicate the effects of the error on the various elements of financial statements prepared at the end of the *current* year, using the following code: *O* = overstated, *U* = understated, *NE* = no effect.

Situation	Revenue	Cost and/or Expenses	Net Income	Assets	Liabilities	Owners' Equity
a. No record made of goods purchased and received on Dec. 31; goods omitted from physical count of inventory.						
b. Made sale in late December; goods were delivered on Dec. 31 but were also included in physical inventory Dec. 31						
c. In taking the physical inventory, some goods in a warehouse were overlooked.						
d. A purchase made late in year was recorded properly on the books, but the goods were not included in the physical count of inventory.						

Use the following information for Exercises 3, 4, and 5.

Widmer Corporation's accounting records disclose the following information regarding purchases of inventory item no. 329 during May:

	Units	Unit Cost	Total Cost
Beginning inventory, May 1 .....	50	\$10.10	\$505
Purchase, May 3 .....	40	11.00	440
Purchase, May 12 .....	90	12.00	1,080
Purchase, May 18 .....	20	13.75	275

On May 15, Widmer sold 150 units at a price of \$16.10 each.

3. Assume Widmer uses a *perpetual inventory system*. Compute the cost of goods sold and the cost of the ending inventory of 50 units under each of the following inventory methods.

	Cost of Goods	
	Sold	Inventory
a. FIFO cost.....	\$ _____	\$ _____
b. LIFO cost .....	\$ _____	\$ _____
c. Average cost.....	\$ _____	\$ _____

4. Assume Widmer uses a *periodic inventory system*. Compute the cost of goods sold and the cost of the ending inventory of 50 units under each of the following inventory methods.

	Inventory	Cost of Goods Sold
a. FIFO cost.....	\$ _____	\$ _____
b. LIFO cost .....	\$ _____	\$ _____
c. Average cost.....	\$ _____	\$ _____

5. Assume the replacement cost of each unit of item no. 329 on May 31 is \$12.50, and that Widmer uses the FIFO cost flow assumption. Compute the cost of ending inventory and the cost of goods sold applying the *lower-of-cost-or-market rule* (with "cost" being defined as the FIFO cost computed in exercises 3 and 4 above).
- a. Cost of ending inventory using LCM rule ..... \$ \_\_\_\_\_
- b. Cost of goods sold using LCM rule ..... \$ \_\_\_\_\_

6. On July 20, 20\_\_, a company's accountant is in the process of preparing financial statements for the year ending June 30, 20\_\_. The physical inventory, however, was not taken until July 10, 20\_\_, and the accountant finds it necessary to establish the approximate inventory cost at June 30, 20\_\_ from the following data:

Physical inventory, July 10, 20__ .....	\$30,000
Transactions for period July 1 – July 10:	
Sales.....	14,800
Purchases .....	16,950

The gross profit on sales of the past couple of years has averaged 22.5% of net sales. In the space below, compute the approximate inventory cost at June 30, 20\_\_.

7. Toy Mart uses the retail method to estimate its inventory at the end of each month. The following information is available at July 31:

	Cost	Retail
Inventory, June 30 .....	\$292,500	\$450,000
Purchases during July.....	<u>187,500</u>	<u>300,000</u>
Goods available for sale during July.....	<u>\$480,000</u>	<u>\$750,000</u>

Retail Sales in July totaled \$350,000

- a. The cost percentage that would be used in applying the retail method for the month of July..... %
- b. The estimated inventory at July 31, stated in retail prices..... \$ \_\_\_\_\_
- c. The estimated inventory at July 31, stated at cost ..... \$ \_\_\_\_\_